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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/791,898	03/04/2004	Kiyoe Ochiai	118936	6968

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EXAMINER

SMITH, TYRONE W

ART UNIT	PAPER NUMBER
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2837

DATE MAILED: 08/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/791,898

Applicant(s)

OCHIAI ET AL.

Examiner

Tyrone W. Smith

Art Unit

2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1 and 3-13 is/are allowed.
- 6) ☒ Claim(s) 14, 15, 18-20, 24, 25 and 28-30 is/are rejected.
- 7) ☒ Claim(s) 16, 17, 21-23, 27, 28 and 31-33 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 14-15, 18-19, 24-25 and 28-29 rejected under 35 U.S.C. 103(a) as being unpatentable over Moriya et al (Pub No. US 2002/0105300 A1) in view of Kumar et al U.S. Patent (6,023,137).

Regarding Claims 14. Moriya discloses a first step of precharging a capacitor element (Figure 1 item 40) provided on an input side of first and second inverters (Figure 1 items 30 and 32) controlling energization of the first and second three-phase motor coils (Figure 1 items 24 and 26) respectively that are included in the 2Y motor; and a second step of driving said 2Y motor and while further charging the capacitor element (Figure 1 item 40) after precharging is completed. Moriya does not disclose a motor that is coupled to an internal combustion engine and electric traction motors that are driving wheels of the hybrid vehicle

On the other hand, Kumar et al shows a motor that is coupled to an internal combustion engine and electric traction motors that are driving wheels of the hybrid vehicle (column 2 lines 52-67, and column 3 1-20).

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the internal combustion engine into Moriya et al. The

motivation being that the method will eliminate additional hardware need to generate electric power and enables one to efficiently use both power sources.

Regarding Claim 24. Moriya et al shows a microprocessor that contains a computer recordable recording medium (Rom/Ram) (54 and 56, figure 10) (page 3 paragraph 54 lines 1 - 7) used to store programs that are responsible to operate the power output apparatus.

Regarding Claims 15 and 25, Moriya et al shows how the power supply voltage outputted from the power supply is applied to the capacitor via the inverter. Further, it also teaches how the supply voltage is increased to charge said capacitor element.

Regarding Claims 18 and 28, Moriya et al discloses charging operation performed by using all three arms of said first inverter or using all three arms of said second inverter (page 4 paragraph 57 lines 29-39).

Regarding Claims 19 and 29, by using a first motor coil selected from phase coils (coil 24 u-phase) of said first three-phase motor coil and a first arm corresponding to said first motor coil and selected from said three arms (such as inverter 30 arm T12) of said first inverter, or using a second motor coil selected from phase coils (such as coil 24 u-phase) of said second three-phase motor coil and a second arm corresponding to said second motor coil and selected from said three arms (inverter 32 arm T21) of said second inverter the power -supply voltage is increased (page 3 paragraph 55 lines 9-17).

3. Claims 20 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moriya et al (Pub No. US 2002/0105300 A1) in view of Kumar et al U.S. Patent (6,023,137) further in view of Nitta et al (6,203,468).

The teachings of Moriya and Kumar and the rejection of claims 14-15, 18-19, 24-25 and 28-29 are illustrated above

However, Moriya and Kumar fail to show a control unit that displays on a display unit an indication that preparations for driving said power output apparatus are completed.

On the other hand, Nitta et al shows a control unit 20 connected to a display 27 where the display shows the charging condition (column 6, lines 12-15).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate display 27 into Moriya invention', the motivation being that the display unit will help monitor several functions of the vehicle and improves operator understanding of the present condition of the vehicle.

Allowable Subject Matter

4. Claims 16-17, 21-23, 26-27 and 31-33 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
5. Claims 1 and 3-13 in condition for allowance.

Response to Arguments

6. Applicant's arguments filed July 24, 2006 have been fully considered but they are not persuasive.

Applicant argues that the references of Moriya and Kumar do not disclose a motor that is coupled to an internal combustion engine and electric traction motors that are driving wheels of the hybrid vehicle. Examiner takes Applicants argument in full consideration.

Examiner's rejection is based on the broadest reasonable interpretation of the claims wherein Kumar shows a motor that is coupled to an internal combustion engine and electric

traction motors that are driving wheels of the hybrid vehicle. Further, Moriya shows a microprocessor that contains a computer recordable recording medium (Rom/Ram) (54 and 56, figure 10).

Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. Refer to C.F.R. 1.111 in the M.P.E.P., "In order to be entitled to reconsideration or further examination, the applicant or patent owner must reply to the Office action. The reply by the applicant or patent owner must be reduced to a writing which distinctly and specifically points out the supposed errors in the examiner's action and must reply to every ground of objection and rejection in the prior Office action. The reply must present arguments pointing out the specific distinctions believed to render the claims, including any newly presented claims, patentable over any applied references. If the reply is with respect to an application, a request may be made that objections or requirements as to form not necessary to further consideration of the claims be held in abeyance until allowable subject matter is indicated. The applicant's or patent owner's reply must appear throughout to be a bona fide attempt to advance the application or the reexamination proceeding to final action. A general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references does not comply with the requirements of this section." The Applicant must distinguish the references used in rejection of the case and how it does not teach the invention as claimed.


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tyrone W. Smith whose telephone number is 571-272-2075. The examiner can normally be reached on weekdays from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan, can be reached on 571-272-2800 ext. 37. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tyrone Smith
Patent Examiner

Art Unit 2837



LINCOLN DONOVAN
SUPERVISORY PATENT EXAMINER